

## **ABSTRACT**

The present invention provides a new use for a thylakoid extract, that is for oral route of administration, and a composition comprising the thylakoid extract in adjunction with an acceptable carrier for oral administration. Besides the pharmaceutical use, the thylakoid extract enters the composition of food or food supplements, for its innocuity and its capacity to provide a diet enriched in anti-oxidants and anti-inflammatory compounds. Therefore, in accordance with the present invention is provided the use of a thylakoid extract in the making of an oral composition for treating or preventing a disease or disorder involving the formation of reactive oxygen species or inflammation. Also is provided a method for treating or preventing a disease or disorder involving the formation of reactive oxygen species or inflammation in an individual, which comprises the step of orally administering an effective dose of a thylakoid extract. Further is provided an oral composition comprising a thylakoid extract and a vehicle for oral ingestion or oral administration. An oral composition comprising purified thylakoids and a carrier for oral ingestion or oral administration, with the proviso that the carrier does not essentially consists of water, physiological saline or propylene glycol is also provided as food or a food supplement, or as a pellet, or encapsulated granules or powder. The carrier may be present in an amount of 0.01% to 95% (w/w) of the total composition. The purified thylakoids are present in an amount which achieves a dosage of 0.1 to 10 mg per Kg of a subject's body weight.